Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
Third Periodic Review of the Commission's	)	MB Docket No. 07-91
Rules and Policies Affecting the Conversion	)	
To Digital Television	)	

Comments of the Arkansas Educational Television Commission

1. The Arkansas Educational Television Commission (AETC), has prepared the following Comments for consideration by the Commission in connection with its Third Periodic Review of the Commissions Rules and Policies Affecting the Conversion to Digital Television.

2. AETC operates KETS TV and KETS DT licensed to the capital city of Little Rock, as its flagship station which signed on in 1966. AETC expanded its service area in 1976 with the addition of three additional transmitters. KAFT TV and KAFT DT serve the northwest area of the state, including the city of Fayetteville home of the University of Arkansas. KTEJ TV and KTEJ DT serve the northeast area of the state, including the city of Jonesboro home of the Arkansas State University. KETG TV and KETG DT serve the southwest area of the state, including the city of Arkadelphia home of Henderson State University. AETC again expanded its service area in 1980 with an additional transmitter. KEMV TV and KEMV DT serve the north central area of the state, including several smaller cities which are home to private colleges and universities. AETC made a final expansion of its service area in 2006 with an additional transmitter. KETZ DT serves the

southeast area of the state, including areas in the largely rural and economically underdeveloped Mississippi Delta.

INTRODUCTION AND BACKGROUND

The Arkansas Public Television Network

3. The Arkansas Educational Television Commission (AETC) is licensee of 5 analog television stations and 6 digital television stations within the State of Arkansas. AETC has built-out its DTV stations through-out the State (including a new DTV Only Singleton station) while trying to execute the transition to DTV in the most fiscally responsible manner possible. It is AETC's goal to meet is educational mission objectives while being fiscally responsible in its spending of taxpayer funds. To that end, AETC was able to significantly reduce its transitional costs to DTV by securing VHF channel assignments for many of its stations and avoiding the construction of extremely costly UHF facilities for its stations. In doing so, AETC reduced its expenditures of both federal and state funds while continuing to provide services to Arkansans.

The Commission's Implementation of the Post-Transition DTV Facilities Should Allow the Use of Omni-Directional Antennas for those Facilities that are Moving to New DTV Channels and No longer need Directional Antennas for Protection of other DTV Stations.

4. In the Commission's Notice of Proposed Rulemaking (NPRM) it is proposed to limit stations' ability to fully serve their communities. The Commission has proposed that stations' would be required to "replicate" the existing DTV station

contours with their post-transition DTV Channel. If this proposal is adopted, stations would be severely limited in their ability to serve their communities. Many stations have built DTV facilities with directional antennas to protect existing analog stations that will no longer require protection after the cessation of analog television. It is illogical for stations to be limited to the "replication" of these directional antenna patterns for stations that no longer require any protection.

5. In the case of KETS-DT in Little Rock, Arkansas, the currently allotted DTV facility based upon the proposed "Final" DTV Table of Allotments is channel 7 with an ERP of 8.056KW (DA). However, this ERP is based upon the "envelope" of the existing Channel 5 DTV antenna. For the post-transition DTV facility at KETS-DT, an omni-directional antenna would allow the station to serve those areas that can currently receive the omni-directional analog signals from KETS-TV; but currently not the signals from the directional KETS-DT on channel 5. Thereby, eliminating potential "new white-spaces" that could be created in areas that are not adequately served by current DTV service but do currently receive analog service. However, if the rules as proposed in the NPRM are adopted, KETS-DT on channel 7 would be limited to only 0.293 KW (293 watts) non-directional in order to fit within the envelope of the channel 5 pattern with a channel 7 omni antenna.

6. In this particular case, the population served by KETS-DT would drop from its allotted population count of 952,721 to 799,151. This population loss of 153,570 persons would result in essentially a "new white space" being created

simply as a matter of this particular rule. As a practical matter, studies conducted by our engineers indicate that KETS-DT could operate with an omni-directional antenna with up to 26.73 KW and still meet the proposed 0.5% interference criteria to other post-transition DTV stations. The population served by this facility would be approximately 1,074,516 persons. This facility would more closely match the current analog service population from KETS-TV of 1,073,108.

KETS-DT Little Rock, Arkansas

Post Transition Allotment 8.056 kW DA	0.293 kW Omni Contour does not exceed allotment	26.73 kW Omni Maximized - All IX < 0.5%
952,721	799,151	1,074,516

7. The directional pattern for digital channel 5 was developed to protect the analog channel 5 station in Memphis, Tennessee and channel 5 in Ft. Smith Arkansas. However, after the transition is completed, these stations would no longer exist. Also KETS-DT is moving from Channel 5 to Channel 7. Thus, any antenna pattern needed for channel 5 operations would not be necessary for Channel 7 operations.

8. In the case of AETC station KEMV-DT at Mountain View, Arkansas, this proposed rule would result in the post-transition facility for KEMV-DT being severely limited with an omni-directional antenna. KEMV-DT was originally allocated 20KW ERP for its DTV Channel, but due to financial constraints was only able to be constructed with a 4.05 KW ERP. The draft final table allotted on channel 13 with an ERP of 4.05KW (DA). But, AETC desires to use an omni-directional

antenna for the post-transition facility at KEMV-DT. If the station is required to stay within the directional pattern as established in the proposed final table, the station would be limited to an ERP of only 231 watts (0.231 KW) with an omni-directional antenna. Studies undertaken by our engineers indicate that KEMV-DT could operate with an omni-directional antenna with an ERP of 8.2KW and still meet the proposed 0.5% interference criteria to other post-transition stations.

9. The population served by the KEMV-DT allotment facility is 260,301 and if the station is limited to 231 watts, this population drops to only 158,943 persons. This creates a loss of 101,358 persons or 38.9% of the service population of the allotment. If the station were allowed to operate with an omni-directional facility at an ERP of 8.2 KW, the service population would be 358,807 persons. Clearly, the citizens of Arkansas are better served by KEMV-DT if the station is allowed to operate with an omni-directional antenna and higher ERP than those proposed in the final table and the NPRM.

KEMV-DT Mountain View, Arkansas

Post Transition Allotment 4.05 kW DA	0.231 kW Omni Contour does not exceed allotment	8.2 kW Omni Maximized - All IX < 0.5%
260,301	158,943	358,807

10. In the case of AETC station KETZ-DT at El Dorado, Arkansas, several unique factors should be considered. This station is a DTV only singleton station that was required to change channels and antenna patterns in order to meet the Commission's criteria as the station was originally an out-of-core spectrum analog

allotment. AETC was able to eventually build this station on channel 12 with severe limitations requiring its current directional antenna pattern in order to protect neighboring analog and digital stations. At the cessation of analog television and as post-transition DTV channels are changed, KETZ-DT would no longer have these severe limitations to its current directional antenna pattern. The Commission did change the post-transition DTV channel for this station from channel 12 to channel 10 in the "Final Table" that was recently released. Since KETZ-DT was a singleton station it was essentially precluded from choosing another post-transition channel during the channel election process. AETC applauds the Commissions' action in this case and the granting of channel 10 as the post-transition channel for KETZ-DT will significantly reduce interference to the channel 12 facility in Little Rock, Arkansas. However, the Commission action in this case is only one part of the action required to make channel 10 as a viable post-transition channel for AETC. There are significant benefits to KETZ-DT moving from channel 12 with a directional antenna to channel 10 with an omni-directional antenna. Interference is substantially reduced to KTHV-DT channel 12 in Little Rock, AR and the service population of KETZ-DT would increase from 362,791 to approximately 596,420 if KETZ-DT could operate on channel 10 with an ERP of 14.65KW omni. It is noted that this channel 10 facility would still meet the Commission's proposed 0.5% interference criteria. Thus, granting the use of channel 10 at El Dorado also necessitates that AETC be able to utilize an omni-directional antenna for the channel 10 facilities of AETC. As noted above, there is currently an existing analog channel 10 facility on the same

tower as the channel 12 KETZ-DT antenna. It makes little since to replicate the existing channel 12 directional antenna requirements on channel 10 if there is an existing channel 10 omni-directional facility (that is being abandoned by its analog broadcaster) that could easily be modified for use by KETZ-DT.

KETZ-DT El Dorado, Arkansas

Channel 12 Post Transition Allotment 6.0 kW DA RCAMSL 569 m	Channel 10 0.134 kW Omni RCAMSL 638 m Contour does not exceed allotment	Channel 10 14.65 kW Omni RCAMSL 638 m Maximized - All new IX < 0.5%
362,791	336,275	596,420

11. AETC urges the Commission to reconsider this extremely important issue and allow those stations that are transitioning to new post-transition DTV channels to use omni-directional antennas. This would allow these stations to adequately serve their communities by allowing increases in coverage to more closely match that of their existing analog station. These simple steps will eliminate the possibility of new "white-spaces" being created where existing analog viewers will not be adequately served by post-transition DTV signals due to the requirement of illogical directional antenna patterns for new channels that do not need them.

The Commission Should Allow Stations to Increase or Maximize Their Post-Transition DTV Facilities Prior to the February 2009 Deadline

12. The Commission has proposed in its NPRM in this proceeding to not allow station to maximize their coverage or service beyond that of their existing DTV facility. AETC disagrees with this approach. As demonstrated above, if the

AETC stations are limited in their facilities to that of their existing DTV facility, the citizens of Arkansas will be short-changed from adequate DTV coverage. New "White Spaces" would be created in those areas where the existing analog service is received well by viewers but due to the limitations imposed by the Commission, AETC would not be able to build full facilities to provide coverage more closely matched to that of their existing analog stations.

13. Public Television stations are at a unique disadvantage in this scenario. AETC has limited funds available to it for its post-transition facility construction, and due to its funding source requirements (such as NTIA and CPB funding as well as State funds) it is only allowed to build one post-transition DTV facility. Thus, it must build a facility that is essentially the "final" facility for the February 2009 deadline. It cannot afford to build an "allotment" facility for the deadline and then build a second "maximized" facility after the deadline. The Commission should allow stations to build their final and "Maximized" facilities for the post-transition world by the February 2009 analog cessation date.

14. The concept, as proposed in the NPRM, that stations would be able to petition the Commission after the February 2009 deadline for expanded facilities would mean that AETC would not be able to build its post-transition facilities until well beyond the established deadline. Thus, this approach would deprive Arkansans of Public Television programs and educational programs in the interim period. This is truly an unworkable situation.

15. AETC urges the Commission to adopt procedures to allow stations to apply for and build maximized DTV facilities for their post-transition channels for the February 2009 deadline.

Stations should be afforded adequate time to construct new final DTV channel Facilities.

16. Given the complex transmission system equipment that must be removed and installed in time for the February 2009 deadline, the Commission should adopt simplified procedures for the application and grant of post-transition DTV construction permits.

17. AETC has unique requirements that are mandated by the State of Arkansas on any contracts for tower work and construction. This process can take months or years to complete. Hence, AETC's ability to meet the stringent time deadlines imposed by the Commission is limited by other entities within the Arkansas State Government which are outside the control of AETC. The lead times required to get rigging and construction contracts with contractors that are licensed to perform work within the State of Arkansas presents many challenges and therefore, it may take in excess of the time allotted by the Commission for AETC to complete construction of its post-transition DTV facilities.

18. AETC urges the Commission to begin accepting and granting construction permits for post-transition facilities at least 18 months prior to the February 2009 deadline to allow for the state bidding and construction processes.

Stations Cannot Begin to Construct their Post-Transition DTV Facilities Until After Occupied Analog Channels Are Vacated

19. In the case of KETS-DT, AETC cannot transition to its post-transition DTV channel 7 until the cessation of analog operations of KATV-TV which currently occupies the channel. In this scenario, KETS-DT wouldn't be able to begin operations until such time as KATV vacates its operations on channel 7.

20. The antenna aperture space to be utilized for the post-transition operations on channel 7 is currently occupied by the KETS-DT channel 5 antenna. So, KETS-DT will need to shut-down operations on channel 5 and remove the antenna before construction of the channel 7 antenna can be initiated. This will require that KETS-DT will be off the air for the period of the construction. This task may take many weeks to complete depending upon weather and tower crew availability. During this interim period, viewers will be without the KETS-DT service. The Commission should allow stations to make these necessary short-term changes in operations without burdensome filing requirements for STA's and other authorizations.

21. The Commission's final schedule should allow for accommodation of stations inability to begin construction on channels that will not be vacated until February 2009. Further, the Commission should allow stations some flexibility in scheduling to allow for delays caused by weather, tower crew availability, and purchasing processes that are imposed on state agencies.

The Commission Should Afford Stations an Opportunity to Improve Their Post-Transition DTV Facilities with Channel Changes Prior to February 2009

22. Given the funding limitations noted earlier, AETC cannot use a "phased-in" approach or a multi-step process to transition or improve its facilities. The limited funds available to AETC essentially require that it build the "final" facility the first time as its only gets "one bite at the apple" without the opportunity to build temporary facilities. Allowing changes needed in KETZ-DT antenna from directional to omni-directional would allow AETC to avail itself of the appropriate funding sources and make the transition to new facilities only once.

Conclusions

23. In summary, the rules proposed by the Commission in its Third Biennial Review should be revised to address the practicality of station construction limitations. The Commission should refrain from adopting rules that limit stations' ability to use omni-directional antennas in situations that do not warrant protection of other stations. Further, the Commission should allow stations to maximize their post-transition DTV facilities as proposed in the Final Table of Allotments prior to the February 2009 deadline. Many stations do not have the option of requesting additional funds after the final transition date to pursue maximization after the cessation of analog television. The Commission should be mindful of the unique burdens of State Government agencies and the unique purchasing requirements and processes when its sets the final schedule and deadline for the construction of post-transition DTV facilities. In the case of AETC, these processes can take month or years to complete.

Respectfully Submitted:

ARKANSAS PUBLIC TELEVISION COMMISSION

By: Allen Weatherly

Executive Director

Legal Counsel:

Todd D. Gray
Margaret L. Miller
Barry Persh
Dow Lohnes, PLLC
1200 New Hampshire Avenue NW
Suite 800
Washington, D.C. 20036

Engineering Counsel:

Dennis Wallace
Meintel, Sgrignoli, & Wallace
1282 Smallwood Drive
Suite # 372
Waldorf, MD. 20603
(202)251-7589
Email: WallaceDTV@aol.com
www.MSWDTV.com